

## REMARKS

### The Amendments

Claims 1-43 are pending in the application. The Examiner has withdrawn claims 9-31 and 33-42 from consideration. Applicants have amended claims 1, 3, 9, 10, 24, 29, 32-34, 36, 38, 39, and 41, have canceled claims 2, 35, and 40, and have added new claim 44. In particular, applicants have amended claim 1 to incorporate the claim 2 definition of A<sup>1</sup>. Applicants have canceled claim 2 and have amended the dependencies of claims 3, 33, 34, and 36 accordingly. Applicants have amended the proviso of claim 1 and have also amended dependent claims 10 and 29 in view of the above amendment to claim 1. Applicants have further amended claim 1 to delete the term "hydrogens" from the definition of radical R<sup>10</sup>. One of skill in the art would understand that the recitation of this term is a typographical error.

Applicants have amended claims 9 and 24 to recite that "K is -(O)- or -S(O)<sub>2</sub>". Support for this amendment may be found, for example, in original claims 9 and 24, as filed.

Applicants have amended claims 34 and 39 to incorporate the language of claims 35 and 40, respectively, and have canceled claims 35 and 40. Applicants have amended claims 36 and 41 to recite a "method for treating a hepatitis C viral infection in a patient". Applicants have amended claims 38, 39, and 41 to add a dependency from new claim 44.

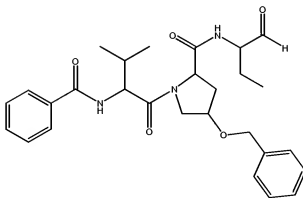
None of these amendments adds new matter. Their entry is requested.

The cancellation of any subject matter by amendment herein is without waiver of applicant's rights to file divisional or continuing applications directed to any canceled subject matter, which claim priority from this application.

Applicants request reconsideration of the above-identified application in view of the foregoing amendments and the following response.

Restriction Requirement/Election of Species

In reply to the August 9, 2006 Restriction Requirement, applicants elected for further prosecution the subject matter of Group I, claims 1-32 and 43, drawn to chemical compounds of the formula (II), classified in class 548, wherein the compound comprises a pyrrolidine ring, or in class 562, wherein the compound comprises a carboxylic acid group. Applicants also elected the species of Compound 149 of Table 6 at original specification page 97 (substitute specification page 99) for prosecution on the merits:



Compound 149.

Applicants also stated that, if and when any of the claims of Group I are found allowable, they would request rejoinder of the subject matter of Group II, drawn to methods of treating or preventing hepatitis C virus infection and divers other diseases or conditions, comprising administering to a patient a compound as set forth in Group I and a pharmaceutical composition comprising a compound as set forth in Group I, all classified in class 51 in subclasses depending on the identifies of the variables in formula (II).

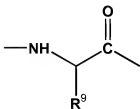
According to the February 27, 2007 Office Action, the Examiner has searched the subject matter of the claims of Group I, wherein the compounds comprise the pyrrolidine moiety embodiment of the A<sup>1</sup> group of former claim 1. The Examiner has further stated that no prior art rendering such compounds unpatentable was found. Office Action, page 2.

### The Rejections

#### Nonstatutory Double Patenting

The Examiner has rejected claims 1-8, 32, and 43 as allegedly unpatentable for obviousness-type double patenting over claims 1-26 of U.S. Patent No. 6,265,380 ("the '380 patent'). Office Action, page 3. According to the Examiner, although the conflicting claims are not identical, they are not patentably distinct from each other. In particular, the Examiner states that the compounds of formula (II) specified in the claims of the patent are inclusive of species embraced by the instant claims. Applicants traverse.

Applicants disagree that the claims of the '380 patent' overlap with the subject matter of the instant claims and that the instant claims are therefore patentably indistinct. Specifically, the proviso of instant claim 1 recites that when A<sup>2</sup> is



and K is  $\text{—C(O)—}$ , then V is not  $\text{—N(R}^{11}\text{)—}$ . Applicants respectfully request that the rejection for obviousness-type double patenting over claims 1-26 of the '380 patent' be withdrawn.

The Examiner has also rejected claims 1 and 43 as allegedly unpatentable for obviousness-type double patenting over claims 1-20 of U.S. Patent No. 6,617,309 ("the '309 patent'").<sup>1</sup> Office Action, page 4. According to the Examiner, although the conflicting claims are not identical, they are not patentably distinct from each other. In particular, the Examiner states that the compounds of formula (II) specified in the claims of the '309 patent' are inclusive of species embraced by the instant claims. Applicants traverse.

For the same reasons recited above with respect to the '380 patent', applicants disagree that the claims of the '309 patent' overlap with the subject matter

---

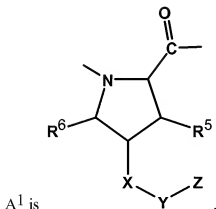
<sup>1</sup> Applicants note for the record several typographical errors in claim 1 of the '309 patent', as issued. First, the text at column 126, lines 54-56, of the patent should be deleted. Second, the chemical moiety at column 127, line 42, of the patent should be substituted with radical "R<sup>1n</sup>", not "R<sup>9n</sup>". Third, the chemical moiety at column 127, line 55, should be substituted with radical "R<sup>9n</sup>", not a methyl group. These errors are readily apparent from a review of the file history of the patent.

claimed in the instant application. Applicants respectfully request that the rejection for obviousness-type double patenting over claims 1-20 of the '309 patent' be withdrawn.

35 U.S.C. § 102

The Examiner has rejected claims 1, 32, and 43 under 35 U.S.C. § 102(b) as allegedly being anticipated by Lehmann *et al.*, *Helvetica Chimica Acta* 33:1217-1226 (1950) ("Lehmann"). Office Action, page 6. According to the Examiner, Lehmann discloses intermediates used in the production of aminoketone compounds that are allegedly within the scope of the above-identified claims.<sup>2</sup>

As described above, applicants have amended the claims to recite that:



Applicants submit that this amendment removes any possible overlap between the subject matter of the amended claims and the compounds of Lehmann. Applicants therefore

---

<sup>2</sup> Applicants disagree that the chemical structures shown on pages 6 and 7 of the Office Action represent "DL-4-propionylamino-6-methyl-heptan-3-one" or "DL-9-methyl-7-caproylamino-decan-9-one" (or "DL-9-methyl-7-caproylamino-decan-6-one"). Given that the instant claim amendments overcome the 35 U.S.C. § 102(b) rejection in any case, this disagreement is not significant.

request that the rejection of claims 1, 32, and 43 as anticipated by Lehmann under 35 U.S.C. § 102(b) be withdrawn.

Allowable Subject Matter

The Examiner states that claims 2-8 are objected to as being dependent upon a rejected base claim but otherwise allowable if rewritten in independent form and additionally limited to embodiments where radical K is -C(O)- only. Office Action, page 7. As described above, applicants have amended claim 1 to incorporate the claim 2 definition of A<sup>1</sup>, have canceled claim 2, and have amended claim 3 to depend from claim 1. Applicants respectfully request that the amended claims, including withdrawn claims 9-32, be fully searched and examined with respect to all claimed embodiments of radical K. Such a search should not be unduly burdensome in view of the amendments to the definition of A<sup>1</sup>.

The Examiner also states that rejoinder of the pharmaceutical composition claims in Group II will not be problematic but recommends that the method claims in Group II be amended to recite only the treatment of hepatitis C virus infection. According to the Examiner, the inhibition of serine proteases generally, and the prevention of hepatitis C virus infection, do not find enabling support in the instant specification. Office Action, page 8.

Applicants disagree that the former claims are not fully enabled. Solely to expedite prosecution of the application, applicants have adopted the Examiner's

recommendations by amending claims 34 and 39 to incorporate the language of claims 35 and 40, respectively, by cancelling claims 35 and 40, and by amending claims 36 and 41 to recite a "method for treating a hepatitis C viral infection in a patient". Applicants request that the withdrawn Group II claims be rejoined and that the rejoined claims be fully searched and examined in the next Office Action.

### Conclusion

In view of the above, applicants request that the Examiner fully search and examine the remaining claims in the application. Applicants request favorable consideration and early allowance of the claims.

Respectfully submitted,

/David A. Roise/

---

James F. Haley, Jr. (Reg. No. 27,794)  
David A. Roise (Reg. No. 47,904)  
Attorneys for Applicants

ROPES & GRAY LLP  
Customer No. 1473  
1211 Avenue of the Americas  
New York, New York 10036-8704  
Tel.: (650) 617-4000  
Fax: (212) 596-9090